

Title (en)

Power supply circuit and luminaire

Title (de)

Stromversorgungskreis und Leuchte

Title (fr)

Circuit d'alimentation électrique et luminaire

Publication

EP 2755447 A1 20140716 (EN)

Application

EP 13159452 A 20130315

Priority

JP 2012268840 A 20121207

Abstract (en)

There is provided a power supply circuit (14) including a power converting unit (20) configured to convert a conduction angle controlled alternating-current voltage supplied via a power supply path (25) and supply a direct-current voltage to a load (12), a control unit (21) configured to detect a conduction angle of the alternating-current voltage and control the conversion of the voltage according to the detected conduction angle, and a power supply unit for control (22) including a first branch path (40) electrically connected to the power supply path (25), a semiconductor element (51) configured to adjust an electric current flowing to the first branch path (40), a thermosensor (52, 55) configured to limit, if the temperature of the semiconductor element (51) is equal to or higher than an upper limit temperature, an electric current flowing to the semiconductor element (51). The power supply unit for control (22) converts the alternating-current voltage input via the first branch path (40) and supplies a direct-current voltage to the control unit (21).

IPC 8 full level

H05B 44/00 (2022.01)

CPC (source: EP US)

H02M 7/217 (2013.01 - US); **H05B 45/31** (2020.01 - EP US)

Citation (search report)

- [I] US 2012242237 A1 20120927 - CHEN SHENGLUN [CN], et al
- [I] EP 2503850 A2 20120926 - PANASONIC CORP [JP]
- [I] US 2012223651 A1 20120906 - MURAKAMI YOSHINOBU [JP], et al
- [A] US 6937484 B2 20050830 - NAKAMURA MASASHI [JP], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2014159602 A1 20140612; CN 103874277 A 20140618; CN 103874277 B 20180508; EP 2755447 A1 20140716; JP 2014117051 A 20140626; JP 6037164 B2 20161130

DOCDB simple family (application)

US 201313830347 A 20130314; CN 201310104942 A 20130328; EP 13159452 A 20130315; JP 2012268840 A 20121207